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ADDITIONS TO THE FLORA OF WESTERN OREGON

By J. C. NELSON

The conditions of plant growth are so favorable in that part of Oregon lying west of the Cascade Mountains, and the establishment of introduced species is so easy, that it is becoming a serious task to keep pace with the increase. Not only are plants properly belonging to the Californian flora which prevails south of the Calapooias constantly extending their range to the northward, together with a steady immigration of inland species down the valley of the Columbia, but there is a constant influx of European immigrants which become self-sown and locally established very rapidly. It is therefore a matter of some regret to the local collectors who so warmly welcomed the latest manual covering this region (Piper and Beattie's *Flora of the Northwest Coast*) that its authors did not take more positive ground in regard to the inclusion of these immigrants. Their problem is one which confronts every botanist who undertakes to catalogue the flora of any considerable extent of territory. Two opposite points of view are possible. Either all introduced plants may be excluded, or all may be included. In the latter case, the list will be needlessly swelled by waifs and ballast-plants that will not persist, and are in no sense real members of the local flora; in the former, by leaving out all plants of foreign origin, some of the most abundant and characteristic species may be omitted and the value of the book to the local student seriously impaired. To the layman, the most easily intelligible purpose of any descriptive flora is to render it possible for any student to identify by its aid any plant which he may find growing spontaneously within its geo-

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graphical limits. That this aim is very rarely attained renders it none the less the chief *raison d'être* of every botanical manual. There is a practical problem involved here, as every author comes to realize. No publisher is likely to undertake the production of a work of this kind, unless he can be assured that it will sell. His chief customers will necessarily be the schools and colleges of the district covered. If it becomes evident that the book does not adequately serve the purpose above indicated, its chances of securing the indorsement of these institutions will not be very great. Our pupils in the secondary schools are not interested in taxonomic discussions; they want to be able to name the plants which they encounter in their excursions; and the commonest of these, at least here in Western Oregon, are just as likely to be introduced as indigenous. These foreign species can of course be relegated to an appendix, as has been done by Coulter and Rose in their Monograph of the North American Umbelliferae; but if they are included at all, it is much more convenient for the student to insert them in the body of the work.

The authors of the Flora of the Northwest Coast were of course at liberty to omit *all* introduced species; but since it is plain that they have included *some*, we are left to conjecture on what grounds others were excluded. For example, I have never seen but one specimen of *Ulex europaeus* growing wild about Salem; yet this species is included, while the related *Cytisus scoparius*, which sets our hills and roadsides ablaze in early spring, and is fast becoming a formidable menace to the farmer, finds no mention. Why should *Stellaria media* be included, and *Bellis perennis* be omitted, when the two are found everywhere growing together, and the latter is so abundant as to be in nine cases out of ten the first plant in flower encountered by the student? *Foeniculum vulgare* is a far more abundant and characteristic plant about Salem than *Hesperis matronalis*; yet the latter finds a place while the former does not appear. *Silybum marianum* and *Camelina microcarpa* I have never seen in Oregon except as ballast-plants, while *Melissa officinalis* and *Tanacetum vulgare* are everywhere common. The list could be indefinitely extended. When the most abundant and familiar of our local species find no place in a

work of this kind, one is forced to conclude that its value is never going to be fully appreciated by beginners.

In the case of the indigenous species, it is to be regretted that the authors have selected as their southern boundary a barrier so easily crossed as the Calapooia Range. Experience shows that the species which have been regarded as distinctively Californian are pressing steadily northward, and in many cases have been reported far within the limits of this manual. No hard and fast geographical line of this sort can ever be drawn, and the attempt to do so only confuses and misleads the beginner. In the same way, species that have been considered as belonging to the flora of the interior are continually being transported down the Columbia, and even travelling over the lower summits of the Cascades. To say that these species are only recent introductions, and do not belong ecologically to this district, is only to beg the question. How can we show that they have not been here as long as the species which are more characteristic? The desert plants growing on the gravelly prairies about Salem are just as integral a part of the local flora as any typical west-coast forms.

The fact remains that the number of trained observers here in Oregon is all too few to keep pace with the exuberant invasion of foreign species. A few notes based on my own collections during the past three seasons may serve to show that we cannot accept the Flora of the Northwest Coast as final—which its distinguished authors would be the last to claim.

The following list is not intended to be exhaustive. I am sure that other collectors in this field, notably Mr. M. W. Gorman, of Portland, and Professor M. E. Peck, of Willamette University, will be able to add many names to this enumeration. It is simply a record of plants that I have myself collected, and that have in most cases been submitted to Professor Piper himself for identification. In the case of the grasses I am under obligation to Mrs. Agnes Chase, of the Bureau of Plant Industry at Washington, D. C., for her kindness in determining my specimens. Mr. Kenneth K. Mackenzie, of New York City, has been good enough to verify the sedges. Some of the rarer introduced plants

have been very kindly verified by the staff of the Gray Herbarium. It will be understood that all species included in the following list have been collected within the Oregon limits of the Flora of the Northwest Coast, and that none of them are mentioned in its pages. The length of the list will serve to show how much field work remains to be done in this state before any manual of its flora can be regarded as complete.

1. *Typha angustifolia* L. Common along the mill-race at Eugene, and also observed in the old bed of Lake Labish, two miles east of Brooks, Marion Co.
2. *Syntherisma Ischaemum* (Schreb.) Nash. On sandy shores of the Willamette River at Salem, and also on lawns about the city.
3. *Panicum miliaceum* L. On rubbish-heaps about Salem.
4. *Anthoxanthum Puelii* Lecoq & Lamotte. In dry ditches by the roadside, Turner, Marion Co., and in similar situations near Fairfield in the same county.
5. *Aristida oligantha* Michx. Common along the sandy shores of the Willamette near Salem.
6. *Stipa occidentalis* Thurb. Dry rocky soil near Government Camp, Mt. Hood.
7. *Muhlenbergia filiformis* Rydb. In mud of dried-up ponds near Government Camp, Mt. Hood.
8. *Sporobolus cryptandrus* (Torr.) Gray. Muddy shore of the Columbia on Hayden Island, opposite Vancouver, Wash.
9. *Agrostis hiemalis* (Walt.) BSP., var. *geminata* Hitchc. Wet sandy streets, Newport.
10. *Avena fatua* L. Common along railroad tracks about Salem.
11. *Phragmites communis* Trin. In low ground, Lake Labish; also along the Columbia near Knappa and Blind Slough, Clatsop Co.
12. *Melica Geyeri* Munro. Roadsides about Salem.
13. *Briza minor* L. Abundant under trees in State Fair Ground, Salem.
14. *Poa scabrella* Benth. On gravelly prairies about Salem; also on rocks at Silver Creek Falls, Marion Co.

15. *Festuca rubra* L., var. *megastachys* Gaud. Along railroad tracks and roadsides about Salem.
16. *Festuca idahoensis* Elmer. In dry pastures at Salem and Eugene.
17. *Scleropoa rigida* Griseb. Around buildings in business district, Salem.
18. *Bromus carinatus* Hook. & Arn. Very common in waste places everywhere. Much of what passes as *B. marginatus* Nees should be referred to this species.
19. *Bromus hordeaceus* L., var. *glabrescens* Shear. With the species, and almost equally common.
20. *Bromus tectorum* L. Along the railroad, Salem.
21. *Lolium perenne* L., var. *crisatum* Doell. Border of woods near Eola, Polk Co.
22. *Agropyron caesium* Presl. Dry soil about the lighthouse on Yaquina Head, Lincoln Co.
23. *Triticum vulgare* L. A common escape in railroad yards.
24. *Sitanion jubatum* Sm. Dry soil on Skinner's Butte, Eugene.
25. *Cyperus acuminatus* Torr. & Hook. Alkaline soil by the roadside, near Turner; also in wet ground at Salem.
26. *Cyperus esculentus* L. Common on the sandy shore of the Willamette at Salem.
27. *Eleocharis ovata* R. & S. In ditches along railroad, Walton, Lane Co.
28. *Carex Hallii* Bailey. On rocks in mountain streams at Gates, Marion Co. and Hendricks, Lane Co.; also in the Willamette at Salem.
29. *Carex leptopoda* Mackenzie ined. In low thickets along the McKenzie River at Dedman's Ferry, near Eugene.
30. *Carex subfusca* W. Boott. Dry pasture on mountain-side near Coburg, Lane Co.
31. *Carex interior* Bailey. In low ground in Lake Labish.
32. *Carex specifica* Bailey, var. *brevifructus* Kükenthal. Swampy ground along Silver Creek, near Silverton.
33. *Carex abrupta* Bailey. In a swamp near Government Camp, Mt. Hood.
34. *Carex tumulicola* Mackenzie. Not uncommon in dry ground about Salem.

35. *Carex prairea* Dewey. Boggy meadow near Chemawa, Marion Co.
36. *Scirpus paludosus* A. Nels. In salt-marshes, Seaside, Clatsop Co.
37. *Juncus patens* Mey. Not uncommon in low ground about Salem.
38. *Juncus uncialis* Greene. In low meadows in Lake Labish, near Chemawa.
39. *Humulus Lupulus* L. Our commonest field crop, and a frequent escape to roadsides and thickets throughout the Willamette Valley.
40. *Cannabis sativa* L. On refuse-heaps about Salem.
41. *Chenopodium ambrosioides* L. On sand-bars along the Willamette at Salem.
42. *Chenopodium Botrys* L. Becoming abundant along the Willamette near Salem.
43. *Chenopodium glaucum* L. On sandy shore of the Columbia opposite Vancouver, Wash.
44. *Corispermum hyssopifolium* L. With the last.
45. *Sedum acre* L. Well established on waste ground, Salem.
46. *Agrostemma Githago* L. In grain-fields, Marion and Polk Cos., and on the border of a thicket at Salem.
47. *Silene dichotoma* Ehrh. On gravelly shore of North Santiam River, Detroit, Marion Co.
48. *Silene campanulata* Wats., var. *Greenii* Wats. Rocky summit of Spencer's Butte, near Eugene.
49. *Saponaria officinalis* L. Abundant in sandy soil along the Willamette from Eugene to Salem.
50. *Saponaria Vaccaria* L. In railroad yards, Portland.
51. *Sagina procumbens* L. Rocky border of garden at Elk Rock, Multnomah County.
52. *Cerastium nutans* Raf. In thickets, Falls City, Polk Co.
53. *Arenaria Douglasii* Fenzl. Rocky woods on Spencer's Butte, Eugene.
54. *Ranunculus arvensis* L. In wet meadow near Chemawa, Marion Co.
55. *Ranunculus bulbosus* L. In vacant yard, Salem.

56. *Delphinium Ajacis* L. Abundant on waste ground at Salem.
57. *Papaver Rhoeas* L. In old gardens and waste ground, Salem.
58. *Fumaria officinalis* L. In cultivated ground, Salem.
59. *Corydalis lutea* DC. Rocky border of garden at Elk Rock, Multnomah Co.
60. *Iberis coronaria* Don. Dry soil on Skinner's Butte, Eugene.
61. *Lunaria annua* L. Alluvial soil along Mill Creek, Salem.
62. *Lepidium apetalum* Willd. Waste ground and street parking, Portland, Eugene, and Salem.*
63. *Lepidium perfoliatum* L. Becoming common in waste places about Portland and Salem.
64. *Lepidium campestre* (L.) R. Br. On street-parking, Eugene.
65. *Crambe maritima* L. Sandy beach at base of cliff on Yaquina Head.
66. *Brassica alba* (L.) Boiss. Alluvial bank of stream, Salem.
67. *Sisymbrium Sophia* L. In railroad-yards, Portland.
68. *Lobularia maritima* (L.) Desv. On sandy sea-beach, Newport.
69. *Saxifraga Sibthorpii* Boiss. On wet cliffs at Elk Rock.
70. *Therofon majus* (Gray) Wheelock. Rocky shore of North Santiam River at Gates, Marion Co., and along Silver Creek at Silverton.
71. *Pyrus communis* L. Thoroughly established along a stream near Champoeg, Marion Co.
72. *Horkelia congesta* Hook. Abundant on gravelly prairies about Salem.
73. *Horkelia hirsuta* Lindl. In open woods, Falls City.
74. *Cytisus scoparius* (L.) Link. Abundant on hillsides everywhere in Marion Co.
75. *Lupinus oreganus* Heller. Common in open ground about Salem.
76. *Melilotus indica* (L.) All. Waste ground on river-bank, Salem.
77. *Lotus Torreyi* Greene. Among rocks along the McKenzie River, Hendricks, Lane Co.
78. *Trifolium incarnatum* L. In open woods, Mill City, Marion Co.

* This may possibly be *L. medium* Greene, but the forms are not typical.

79. *Robinia Pseudo-Acacia* L. Escaped from cultivation near Jefferson, Marion Co.
80. *Vicia villosa* Roth. Becoming abundant along fence-rows and railroad embankments about Salem.
81. *Vicia Faba* L. In State Fair Ground, Salem.
82. *Vicia dasycarpa* Tenore. Waste ground, Portland.
83. *Lathyrus latifolius* L. Very common on vacant lots about Salem.
84. *Lathyrus Aphaca* L. Not uncommon in wasteground at Salem.
85. *Linum usitatissimum* L. In railroad-yards and waste places, Salem.
86. *Euphorbia dictyosperma* Fisch. & Mey. Rocky roadside, East Independence, Marion Co.
87. *Euphorbia Lathyrus* L. In an old field, Tualatin; also around gardens at Salem.
88. *Vitis vinifera* L. Thoroughly established in thickets along the river at Salem.
89. *Malva sylvestris* L. In vacant lots and waste places, Salem.
90. *Sidalcea* sp. An apparently undescribed species is not uncommon in dry open places about Salem.*
91. *Boisduvalia glabella* Walp. In swales, Springfield; and in State Fair Ground, Salem.
92. *Onagra strigosa* Rydb. On a sand-bar in the Columbia River at Hayden Island, opposite Vancouver, Wash.
93. *Anogra pallida* (Lindl.) Britt. With the last.
94. *Conium maculatum* L. Very common along streets at Eugene; also on waste ground at Silverton and Portland.
95. *Foeniculum vulgare* Hill. Abundant on vacant lots at Salem.
96. *Lomatium macrocarpum* Coult. & Rose. On gravelly prairies about Salem.
97. *Anethum graveolens* L. In cultivated ground at Salem.
98. *Vinca major* L. Common on roadsides and river-banks about Salem.
99. *Asclepias speciosa* Torr. In dry pastures at Eugene, and in meadows at Gerlinger, Polk Co.

* Prof. Piper regards this as undescribed; but Mr. J. F. Macbride is inclined to refer it to *S. spicata* Greene, a Californian species that has been reported from southern Oregon.

100. *Asclepias mexicana* Cav. On Skinner's Butte, Eugene; and in gravelly prairies and along the railroad near Salem.
101. *Gilia aggregata* Spreng. Rocky summit of Bald Mountain, near Detroit, Marion Co.
102. *Borago officinalis* L. Established on street-parking, Eugene.
103. *Cynoglossum officinale* L. Abundant on vacant lots at Mill City.
104. *Myosotis lutea* (Cav.) Pers., var. *versicolor* (Pers.) Thellung. Becoming common everywhere in fields and on roadsides in the Willamette Valley.
105. *Verbena officinalis* L. About old buildings at St. Paul, Marion Co.
106. *Thymus Serpyllum* L. Escaped from cultivation to roadsides at Jefferson and Salem.
107. *Lamium purpureum* L. Well established under trees on campus of Willamette University, Salem.
108. *Melissa officinalis* L. Common about towns throughout the Willamette Valley.
109. *Lycopus rubellus* Moench. In low ground along the Willamette, Salem.
110. *Mentha Pulegium* L. Common in pastures and on roadsides along the valley of the Mohawk River, above Hendricks.
111. *Mentha rotundifolia* (L.) Huds. On border of thicket near Springfield; and along roadside at Salem.
112. *Mentha Piperita* L. Common in wet places throughout the Willamette Valley.
113. *Physalis pruinosa* L. On gravelly shore of the Willamette at Salem.*
114. *Solanum Dulcamara* L. Very common in thickets in old bed of Lake Labish, appearing as if indigenous; also along Mill Creek at Salem, and in river-thickets at Independence.
115. *Solanum triflorum* Nutt. On sandy shore of the Columbia opposite Vancouver, Wash.
116. *Solanum nigrum* L., var. *villosum* L. On sandy shores of the Willamette at Salem; also on sandy roadsides along the Columbia near Portland.

* What seems to be *P. subglabrata* Mackenzie & Bush has also been collected along the railroad at Salem.

117. *Datura Tatula* L. Growing with *D. Stramonium* L. in sandy river-bottoms near Salem.
118. *Nicotiana attenuata* Torr. In sandy soil about Portland.
119. *Verbascum speciosum* Schrad. Well established in grounds of Lewis & Clark Exposition, Portland.
120. *Linaria Cymbalaria* (L.) Mill. Around old buildings on river-bank, Salem.
121. *Antirrhinum majus* L. On railroad embankments near Salem.
122. *Limosella aquatica* L. On muddy shore of the Columbia opposite Vancouver, Wash.
123. *Veronica Tournefortii* Gmel. Common in cultivated ground, Salem and Oregon City.
124. *Plantago major* L., var. *asiatica* (L.) Dcne. On sandy sea-beach, Newport.
125. *Asperula odorata* L. A frequent escape about Salem and Portland.
126. *Galium verum* L. On street-parking, Salem.
127. *Galium sylvaticum* L. Escaped from cultivation about Salem.
128. *Galium parisiense* L. Dry road-side at base of Skinner's Butte, near Eugene; and on street-parking, Salem.
129. *Galium tricornis* Stokes. Climbing on bushes in a thicket near Eugene.
130. *Valerianella olitoria* Poll. On lawns and stone fences about Salem.
131. *Campanula Medium* L. A frequent escape about Salem.
132. *Campanula rapunculoides* L. On waste ground, Salem.
133. *Solidago caurina* Piper. Dry soil about Government Camp, Mt. Hood.*
134. *Bellis perennis* L. Abundant on lawns, and often in pastures about Salem.
135. *Erigeron corymbosus* Nutt. . On gravelly prairies, Salem.
136. *Ambrosia artemisiifolia* L. Dry roadside near Salem.
137. *Xanthium spinosum* L. On waste ground, Salem.
138. *Helianthus annuus* L. A common escape on river-banks and in waste places, Salem and Eugene.

*A *Solidago* resembling *S. rugosa* Mill., evidently an escape, was found in a plowed field near Salem.

139. *Bidens frondosa* L. Very common in low ground throughout the Willamette Valley.
140. *Coreopsis tinctoria* Nutt. In waste places, Salem.
141. *Lasthenia glaberrima* DC. Dry ditches along railroad near Salem; also near Jefferson, Marion Co.
142. *Chrysanthemum Parthenium* L. On river-banks at Salem; abundant along the railroad at Bridal Veil, Multnomah Co.
143. *Chrysanthemum Balsamita* L., var. *tanacetoides* Boiss. Well established along the railroad near Salem.
144. *Tanacetum vulgare* L. Common on road-sides and river-banks throughout the Willamette Valley.
145. *Artemisia Lindleyana* Bess. On sandy shore of the Columbia opposite Vancouver, Wash.
146. *Artemisia dracunculoides* Pursh. With the last.
147. *Artemisia Douglasiana* Bess. Common in river-bottoms along the Willamette.
148. *Artemisia biennis* Willd. In railroad yards, Portland.
149. *Senecio Cineraria* DC. Escaped to waste ground, Salem.
150. *Senecio Jacobaea* L. In railroad yards, Portland.
151. *Cirsium arvense* (L.) Scop., var. *mite* Wimm. & Grab. With the last.
152. *Cnicus benedictus* L. Borders of fields and on roadsides, south of Salem.
153. *Lactuca Scariola* L. Common in fields and waste places about Eugene and Salem, associated with the var. *integrata* Gren. & Godr.

The species that occur only as ballast-plants (about 75 in number) are not included in the above list, since an enumeration of these has appeared in a recent number of this journal.*

Of the 153 species listed above, 92, or 60 per cent. of the total, are undoubtedly introduced; the remaining 40 per cent. seem to be indigenous, though in the case of several this cannot be affirmed with certainty. The total number of species and named varieties mentioned in the Flora of the Northwest Coast is 1617. It does not seem unreasonable to assume that this number can be brought up to two thousand after a more thorough survey of the field.

The following extensions of range beyond the limits assigned

* September, 1917.

by Piper and Beattie may also be of interest, as showing the rapidity with which many species are spreading. It will be understood that, as in the first list, all my specimens have been collected in Oregon. The range assigned by the authors is given first in each case.

1. *Ceropteris triangularis* (Kaulf.) Underw. "Crevice of rocks, mostly near the sea-coast . . . more common on the Oregon coast." On rocky hillsides near Turner, in the Willamette Valley.
2. *Equisetum littorale* Kühlewein. "Shawnigan Lake, Vancouver Island, *Macoun*." "Agassiz, B. C., *Macoun*." Abundant in marshy ground in Lake Labish.
3. *Phalaris minor* Retz. "On ballast, Nanaimo, Vancouver Island, *Macoun*." On ballast at Linnton.
4. *Gastridium lendigerum* (L.) Gaud. "Umpqua Valley and southward, introduced. Perhaps not in our limits." Common about Eugene.
5. *Festuca aristulata* (Torr.) Shear. "Upper Willamette Valley to California." About Eola, Polk Co., in the central valley.
6. *Festuca rubra* L. "Mostly along the sea-shore." Not uncommon on gravelly prairies about Salem, appearing as if indigenous, and common on lawns, where it is plainly introduced.
7. *Poa multnomae* Piper. "On rock cliffs along the Columbia." On rocks in the gorge of Silver Creek, above Silverton, Marion Co.
8. *Hordeum jubatum* L. "In salt marshes." Common on gravelly prairies about Salem.
9. *Carex verecunda* Holm. "Known only from Mount Hood, Oregon." On grassy shaded roadsides in the hilly country fifteen miles east of Salem.
10. *Carex athrostachya* Olney. "Rare in our limits but common east of the Cascade Mountains. Reported from Victoria, British Columbia, *Macoun*." Common along the muddy shore of the Willamette at Salem.
11. *Carex Hindsii* Clarke. "Along the ocean coast, Vancouver

- Island to Oregon." In overflowed meadows on Hayden Island, opposite Vancouver, Washington.
12. *Scirpus validus* Vahl. "Rare in our limits, reported from Vancouver Island, *Macoun*." In swampy ground near St. Paul, Marion Co.
 13. *Juncus Bolanderi* Engelm. "Vancouver Island to northern California, near the coast." About Springfield in the Willamette Valley.
 14. *Disporum Smithii* (Hook.) Piper. "Along the coast, Nootka Sound . . . to northern California." In woods at Silver Creek Falls, in the western foothills of the Cascades.
 15. *Sisyrinchium birameum* Piper. "Vancouver, Washington, *Piper*." In low ground near Chemawa, Marion County.
 16. *Eriogonum nudum* Dougl. "Upper Willamette Valley and southward." On gravelly prairies about Salem.
 17. *Polygonum bistortoides* Pursh. "Moist meadows in the mountains at 1,500 to 2,000 m. altitude." In low ground about Salem at less than 70 m.
 18. *Amaranthus graecizans* L. "Departure Bay, Vancouver Island, *Macoun*." In waste ground about Eugene.
 19. *Amaranthus blitoides* Wats. "Departure Bay, Vancouver Island, British Columbia, *Macoun*." On the shore of the Columbia at Hayden Island.
 20. *Mollugo verticillata* L. "On river-banks, probably in our limits." Common on the sandy shore of the Willamette at Salem.
 21. *Spergula sativa* Boenn. "Victoria, *Macoun*." In cultivated ground and waste places at Salem.
 22. *Clematis ligusticifolia* Nutt. "Reported from the Willamette Valley, but not verified." Abundant in thickets along the Willamette from Eugene northward.
 23. *Caltha asarifolia* DC. "In bogs, along the coast, Alaska to Oregon." In the old bed of Lake Labish, in the Willamette Valley near Salem.
 24. *Cakile edentula* (Bigel.) Hook. "Very rare along the sea-coast." One of the commonest beach plants about Seaside and Newport.

25. *Radicula obtusa* (Nutt.) Greene. "Reported from Vancouver Island, British Columbia, *Macoun*." Abundant on mud-flats, Oswego Lake, Clackamas Co.; and on the shore of the Columbia at Hayden Island.
26. *Lepidium Draba* L. "Sparingly introduced from Europe; Victoria, B. C., *Anderson*." On ballast at Linnton.
27. *Mitella ovalis* Greene. "In moist ground near the coast, Vancouver Island to California." In woods at Silver Creek Falls, with No. 14.
28. *Sanguisorba microcephala* Presl. "In bogs near the ocean coast, Alaska to northern California." In a swamp near Government Camp, Mt. Hood, at 4,000 feet elevation.
29. *Geum strictum* Ait. "Victoria, British Columbia, *Macoun*. Not elsewhere reported from west of Cascade Mountains." Along wooded roadsides at Elk Rock, near Portland.
30. *Trifolium microdon* Hook. & Arn. "Sandy soil, near the seacoast." Open ground at Falls City, on the eastern slope of the Coast Range.
31. *Osmorhiza ambigua* (Gray) Coult. & Rose. "In the mountains at about 1,500 m. altitude, rare." Not uncommon about Salem at less than 70 m.*
32. *Ledum columbianum* Piper. "In sphagnum bogs, near the mouth of the Columbia River." On sand-dunes at Newport; and in a bog in the old bed of Lake Labish.
33. *Lysimachia Nummularia* L. "Portland, Oregon, *Gorman*." In low thickets along the Willamette at Salem.
34. *Nemophila atomaria* Fisch. & Mey. "Douglas Co., Oregon and southward." Very common in Marion Co. between Marion and Jefferson.
35. *Mertensia denticulata* (Lehm.) Piper. "In woods near the ocean coast in Washington." In low woods along the Willamette at Salem. Macbride's recent revision of this genus clearly shows that this species should be called *M. platyphylla* Heller.
36. *Scutellaria galericulata* L. "Rare in our limits; Mt. Constitution, *Henderson*." In low ground in Lake Labish.

*So determined by Piper; but Macbride regards it as *O. occidentalis* (Nutt.) Torr., which is not included in the Flora of the Northwest Coast.

37. *Scutellaria angustifolia* Pursh. "Rare in our limits; Victoria, *Macoun*." On summit of Spencer's Butte, near Eugene.
38. *Stachys palustris* L. "In wet places, rare in our limits: Vancouver, Washington, *Suksdorf*." In low ground about Eugene and Salem.
39. *Stachys pubens* (Gray) Heller. "In swampy places near the ocean coast." Not uncommon about Eugene.
40. *Castilleja levisecta* Greenm. "In open meadows near the seacoast, Vancouver Island and Washington." In a wet meadow south of Salem.
41. *Heterocodon rariflorum* Nutt. "Said to occur in the Willamette Valley." Found in Lake Labish, and also along the railroad south of Salem.
42. *Campanula prenanthoides* Durand. "In open places, southern Oregon, perhaps not reaching our limits." In rocky woods on Spencer's Butte, near Eugene.
43. *Xanthium varians* Greene. "Sandy banks of the Columbia River." Common along the shores of the Willamette as far south as Independence.
44. *Chrysopsis villosa* (Pursh) Nutt. "Rare west of the Cascade Mountains; Coupeville, Washington, *Gardner*." On gravelly shores of the Willamette from Independence to Salem.
45. *Senecio sylvaticus* L. "Introduced from Europe; Portland, Oregon, *Gorman*." Common in the Coast Range west of Eugene, and abundant along the coast from Newport to the mouth of the Columbia.

In the case of many other species the notation "rare" or "infrequent" is inaccurate as far as the region about Salem is concerned.